

SEQUENCE LISTING

<110> de la Monte, Suzanne
Wands, Jack R.



<120> Transgenic Animals and Cell Lines for Screening Drugs
Effective for the Treatment or Prevention of
Alzheimer's Disease

<130> 0609.4370002

<140> 09/964,678

<141> 2001-09-28

<150> 09/380,203

<151> 2000-04-25

<150> PCT/US98/03685

<151> 1998-02-26

<150> 60/038,908

<151> 1997-02-26

<160> 14

<170> PatentIn version 3.1

<210> 1

<211> 1442

<212> DNA

<213> Unknown

<220>

<223> AD7C-NTP cDNA

 $\langle 220 \rangle$

<221> CDS

<222> (15) .. (1139)

<223>

[illegible]

cac tac acc tgg cta att ttt att ttt att ttt aat ttt ttg aga cag His Tyr Thr Trp Leu Ile Phe Ile Phe Ile Phe Asn Phe Leu Arg Gln 190 195 200	626
agt ctc aac tct gtc acc cag gct gga gtg cag tgg cgc aat ctt ggc Ser Leu Asn Ser Val Thr Gln Ala Gly Val Gln Trp Arg Asn Leu Gly 205 210 215 220	674
tca ctg caa cct ctg cct ccc ggg ttc aag tta ttc tcc tgc ccc agc Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Leu Phe Ser Cys Pro Ser 225 230 235	722
ctc ctg agt agc tgg gac tac agg cgc cca cca cgc cta gct aat ttt Leu Leu Ser Ser Trp Asp Tyr Arg Arg Pro Pro Arg Leu Ala Asn Phe 240 245 250	770
ttt gta ttt tta gta gag atg ggg ttc acc atg ttc gcc agg ttg atc Phe Val Phe Leu Val Glu Met Gly Phe Thr Met Phe Ala Arg Leu Ile 255 260 265	818
ttg atc tct gga cct tgt gat ctg cct gcc tgc gcc tcc caa agt gct Leu Ile Ser Gly Pro Cys Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala 270 275 280	866
ggg att aca ggc gtg agc cac cac gcc cgg ctt att ttt aat ttt tgt Gly Ile Thr Gly Val Ser His His Ala Arg Leu Ile Phe Asn Phe Cys 285 290 295 300	914
ttg ttt gaa atg gaa tct cac tct gtt acc cag gct gga gtg caa tgg Leu Phe Glu Met Glu Ser His Ser Val Thr Gln Ala Gly Val Gln Trp 305 310 315	962
cca aat ctc ggc tca ctg caa cct ctg cct ccc ggg ctc aag cga ttc Pro Asn Leu Gly Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe 320 325 330	1010
tcc tgt ctc agc ctc cca agc agc tgg gat tac ggg cac ctg cca cca Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Gly His Leu Pro Pro 335 340 345	1058
cac ccc gct aat ttt tgt att ttc att aga ggc ggg gtt tca cca tat His Pro Ala Asn Phe Cys Ile Phe Ile Arg Gly Gly Val Ser Pro Tyr 350 355 360	1106
ttg tca ggc tgg tct caa act cct gac ctc agg tgacccacct gcctcagcct Leu Ser Gly Trp Ser Gln Thr Pro Asp Leu Arg 365 370 375	1159
tccaaagtgc tgggattaca ggcgtgagcc acctcaccca gccggctaatt ttagataaaa	1219
aaatatgtag caatgggggg tcttgctatg ttgccaggc tgggtctcaaa cttctggctt	1279
catgcaatcc ttccaaatga gccacaacac ccagccagtc acatttttta aacagttaca	1339
tctttattttt agtatactag aaagtaatac aataaacatg tcaaacctgc aaattcagta	1399
gtaacagagt tcttttataa cttttaaaca aagctttaga gca	1442

<211> 375

<212> PRT

<213> Unknown

<220>

<223> AD7c-NTP cDNA

<400> 2

Met Glu Phe Ser Leu Leu Leu Pro Arg Leu Glu Cys Asn Gly Ala Ile
1 5 10 15

Ser Ala His Arg Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro Ala
20 25 30

Ser Ala Ser Pro Val Ala Gly Ile Thr Gly Met Cys Thr His Ala Arg
35 40 45

Leu Ile Leu Tyr Phe Phe Leu Val Glu Met Glu Phe Leu His Val Gly
50 55 60

Gln Ala Gly Leu Glu Leu Pro Thr Ser Asp Asp Pro Ser Val Ser Ala
65 70 75 80

Ser Gln Ser Ala Arg Tyr Arg Thr Gly His His Ala Arg Leu Cys Leu
85 90 95

Ala Asn Phe Cys Gly Arg Asn Arg Val Ser Leu Met Cys Pro Ser Trp
100 105 110

Ser Pro Glu Leu Lys Gln Ser Thr Cys Leu Ser Leu Pro Lys Cys Trp
115 120 125

Asp Tyr Arg Arg Ala Ala Val Pro Gly Leu Phe Ile Leu Phe Phe Leu
130 135 140

Arg His Arg Cys Pro Thr Leu Thr Gln Asp Glu Val Gln Trp Cys Asp
145 150 155 160

His Ser Ser Leu Gln Pro Ser Thr Pro Glu Ile Lys His Pro Pro Ala
165 170 175

Ser Ala Ser Gln Val Ala Gly Thr Lys Asp Met His His Tyr Thr Trp
180 185 190

Leu Ile Phe Ile Phe Ile Phe Asn Phe Leu Arg Gln Ser Leu Asn Ser
195 200 205

Val Thr Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln Pro
210 215 220

Leu Pro Pro Gly Phe Lys Leu Phe Ser Cys Pro Ser Leu Leu Ser Ser
225 230 235 240

Trp Asp Tyr Arg Arg Pro Pro Arg Leu Ala Asn Phe Phe Val Phe Leu
245 250 255

Val Glu Met Gly Phe Thr Met Phe Ala Arg Leu Ile Leu Ile Ser Gly
260 265 270

Pro Cys Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly
275 280 285

Val Ser His His Ala Arg Leu Ile Phe Asn Phe Cys Leu Phe Glu Met
290 295 300

Glu Ser His Ser Val Thr Gln Ala Gly Val Gln Trp Pro Asn Leu Gly
305 310 315 320

Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu Ser
325 330 335

Leu Pro Ser Ser Trp Asp Tyr Gly His Leu Pro Pro His Pro Ala Asn
340 345 350

Phe Cys Ile Phe Ile Arg Gly Gly Val Ser Pro Tyr Leu Ser Gly Trp
355 360 365

Ser Gln Thr Pro Asp Leu Arg
370 375

<210> 3

<211> 1381

<212> DNA

<213> Unknown

<220>

<223> Incorrect sequence of AD7c-NTP DNA

<400> 3
 tttttttttt gagatggagt tttcgtcttt gttgccagg ctggagtga atggcgcaat 60
 ctcagctcac cgcaacctcc gcctcccggt ttcaagcgat tctcctgcct cagcctcccc 120
 agtagctggg attacaggca tgtgcaccac gctcggttaa ttttgatatt ttttttagta 180
 gagatggagt ttaactccat gttggtcagg ctgggtctga actcccgacc tcagatgatc 240
 tcccgtctcg gcctgccccaa agtgctgaga ttacaggcat gagccaccat gcccggcctc 300
 tgcctggcta atttttgtgg tagaaacagg gtttcaactga tgttgcccaa gctggtctcc 360
 tgagctcaag cagtcacact gcctcagcct cccaaagtgc tgggattaca ggcgtcagcc 420
 gtgcctggcc tttttatttt atttttttta agacacaggt gtaccactct taccaggat 480
 gaagtgcagt ggtgtgatca cagctcactg cagccttcaa ctctgagat caagcaatcc 540
 tctgcctca gcctcccaag tagctgggac caaagacatg caccactaca cctggtaatt 600
 tttattttta tttttaattt tttgagacag agtctcactc tgtcaccag gctggagtgc 660
 agtggcgcaa tcttggctca ctgcaacctc tgcctcccg gttcaagtta ttctcctgcc 720
 ccagcctcct gagtagctgg gactacaggc gccaccacg cctagctaatt tttttgtat 780
 ttttagtaga gatgggggtt caccatgttc gccagggtga tcttgatctc ttgacctgt 840
 gatctgcctg cctcggccta cccaaagtgc tgggattaca ggtcgtgact ccacgcggc 900
 ctatttttaa tttttgtttg tttgaaatgg aatctcactc tgttaccag gtcggagtgc 960
 aatggcaaat ctcggtact cgcaacctct gcctcccggt tcaagcgatt ctctgtctc 1020
 agcctcccaa gcagctggga ttacgggacc tgcaccacac cccgctaatt tttgtatttt 1080
 cattagaggc gggtttacca tatttgtcag gctgggtctc aaactcctga cctcagggtga 1140
 cccacctgcc tcagccttcc aaagtgtgg gattacaggc gtgagccacc tcaccagcc 1200
 ggctaatttg gaataaaaaa tatgtagcaa tgggggtctg ctatgttgcc caggctggtc 1260
 tcaaacttct ggcttcagtc aatccttcca aatgagccac aacaccagc cagtcacatt 1320
 ttttaaacag ttacatcttt attttagtat actagaaagt aatacaataa acatgtcaaa 1380
 c 1381

<210> 4

<211> 1418

<212> DNA

<213> Unknown

<220>

<223> Incorrect sequence of AD7c-NTP cDNA

<400> 4
 tttttttttt gagatggagt ttctgctctt gttgcccagg ctggagtgca atggcgcaat 60
 ctgagctcac cgcaacctcc gcctcccggg ttcaagcgat tctcctgcct cagcctcccc 120
 agtaggctgg gattacaggc atgtgcacca cgctcggcta attttgtatt ttttttagt 180
 agagatggag tttctccatg ttggtcaggc tggctctgaa ctccgacctc agatgatcct 240
 cccgtctcgg cctcccaaag tgctagatac aggactgagc accatgcccg gcctctgcct 300
 ggctaatttt tgtggtagaa acagggtttc actgatgtgc ccaagctggc ctctgagct 360
 caagcagtcc acctgcctca gcctcccaaa gtgctgggat tacaggcgtg cagccgtgcc 420
 tggccttttt attttatttt ttttaagaca cagggtgtcc actcttacc aggatgaagt 480
 gcagtgggtg gatcacagct cactgcagcc ttcaactctg agatcaagca tcctcctgcc 540
 tcagcctccc aaagtagctg ggaccaaaga catgcaccac tacacctggc taatttttat 600
 ttttattttt aattttttga gacagagtct caactctgtc accagggtg gagtgcagtg 660
 gcgcaatctt ggctcaactgc aacctctgcc tcccgggttc aagttattct cctgccccag 720
 cctcctgagt agctgggact acaggcgccc accacgccta gctaattttt ttgtattttt 780
 agtagagatg gggtttcacc atgttcgcca ggttgatgct agatctcttg acctgtgat 840
 ctgcctgcct cggcctccca aagtgcctggg attacaggac gtgacgcca cggcccggcc 900
 tatttttaat ttttgtttgt ttgaaatgga atctcactct gttaccagg ctggagtgca 960
 atggccaaat ctgggtcac tgcaacctct gcctcccggg ctcaagcgat tctcctgtct 1020
 cagcctccca agcagctggg attacgggca cctgcaccac accccgctaa tttttgtatt 1080
 ttcattagag gcgggggttc accatatttg tcaggctggc ctcaaactcc tgacctcagg 1140
 tgaccacact gcctcagcct tccaaagtgc tgggattaca ggcgtgacgc ctcaccaggc 1200
 cggctaattt agataaaaaa atatgtagca atgggggggc ttgctatgtt gccaggctg 1260
 gtctcaaact tctggcttca tgcaatcctt ccaaagtagc cacaacaccc agccagtcac 1320
 atttttaaac agttacatct ttatttttagt ataactagaaa gtgatacgat aacatggcgg 1380
 aacctgcaaa ttcgagtagt acagagtctt ttataact 1418

<210> 5

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> AD7c-NTP oligonucleotide

<400> 5
tgtcccactc ttacccagga tg

22

<210> 6

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> AD7c-NTP oligonucleotide

<400> 6
aagcaggcag atcacaaggt ccag

24

<210> 7

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Beta-Actin oligonucleotide

<400> 7
aatggatgac gatatcgctg

20

<210> 8

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Beta-Actin oligonucleotide

<400> 8
atgaggtagt ctgtcaggt

19

<210> 9
<211> 30
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense oligonucleotide

<400> 9
ttcatcctgg gtaagagtgg gacacctgtg

30

<210> 10
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense oligonucleotide

<400> 10
tggtgcatgt ctttggtccc agctac

26

<210> 11
<211> 30
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense oligonucleotide

<400> 11
atcaacctgg cgaacatggt gaaccccatc

30

<210> 12
<211> 14
<212> DNA
<213> Artificial Sequence

<220>

<223> External guide sequence

<220>

<221> misc_feature

<222> (11)..(11)

<223> May be any nucleotide

<400> 12
cactgcactt ncca

14

<210> 13

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> External guide sequence

<220>

<221> misc_feature

<222> (11)..(11)

<223> May be any nucleotide

<400> 13
ccaggtgtag ncca

14

<210> 14

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> External guide sequence

<220>

<221> misc_feature

<222> (11)..(11)

<223> May be any nucleotide

<400> 14
caaggtccag ncca